

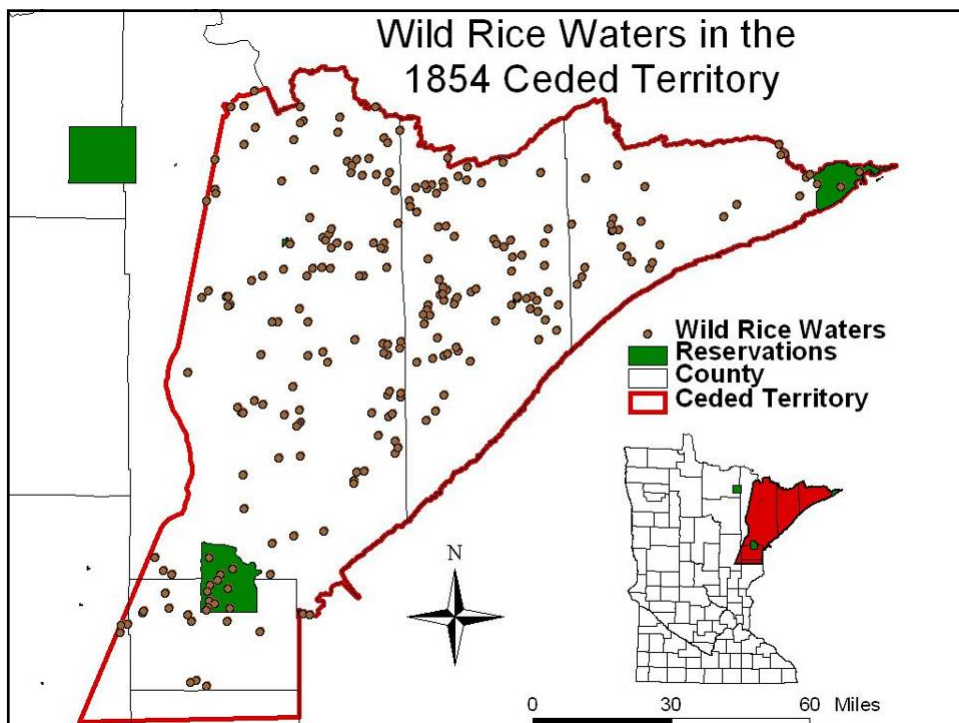
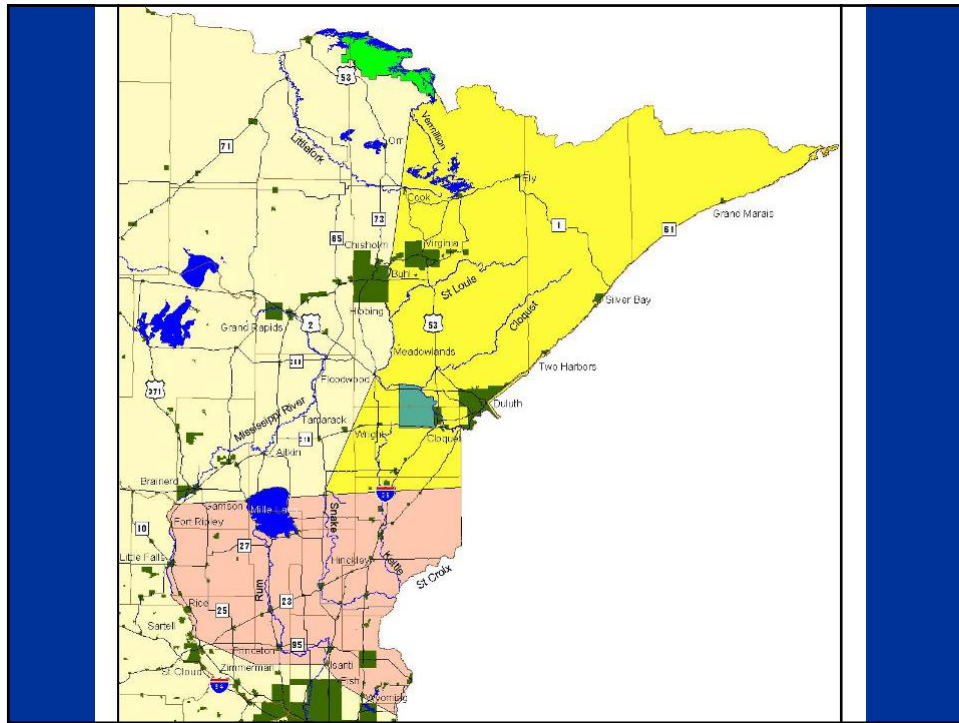
Tribal concerns regarding mining impacts within the Mesabi Iron Range

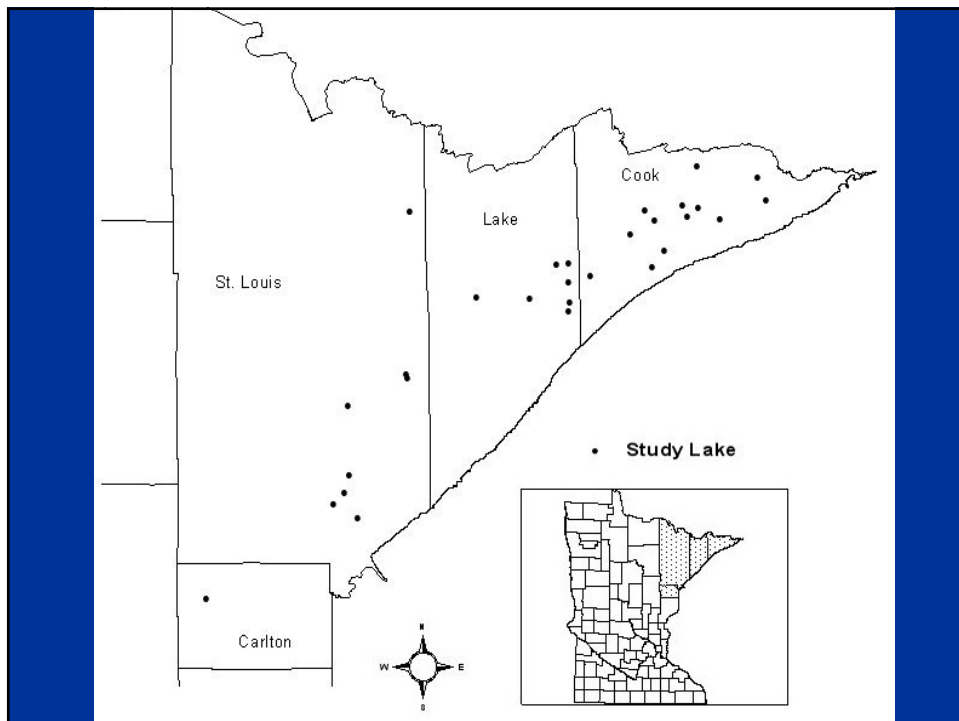
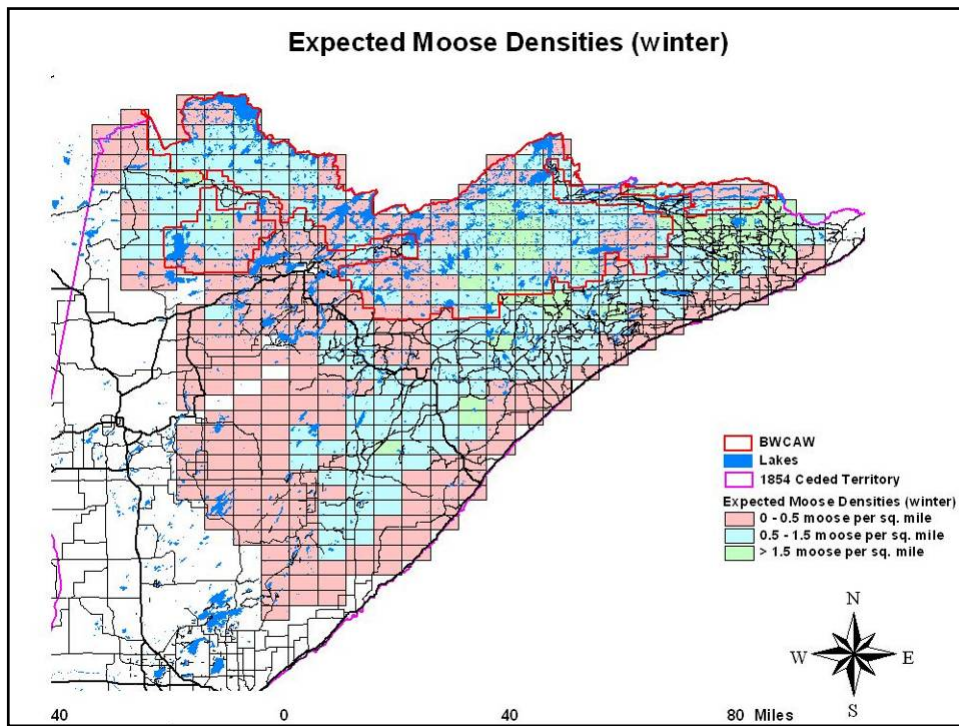


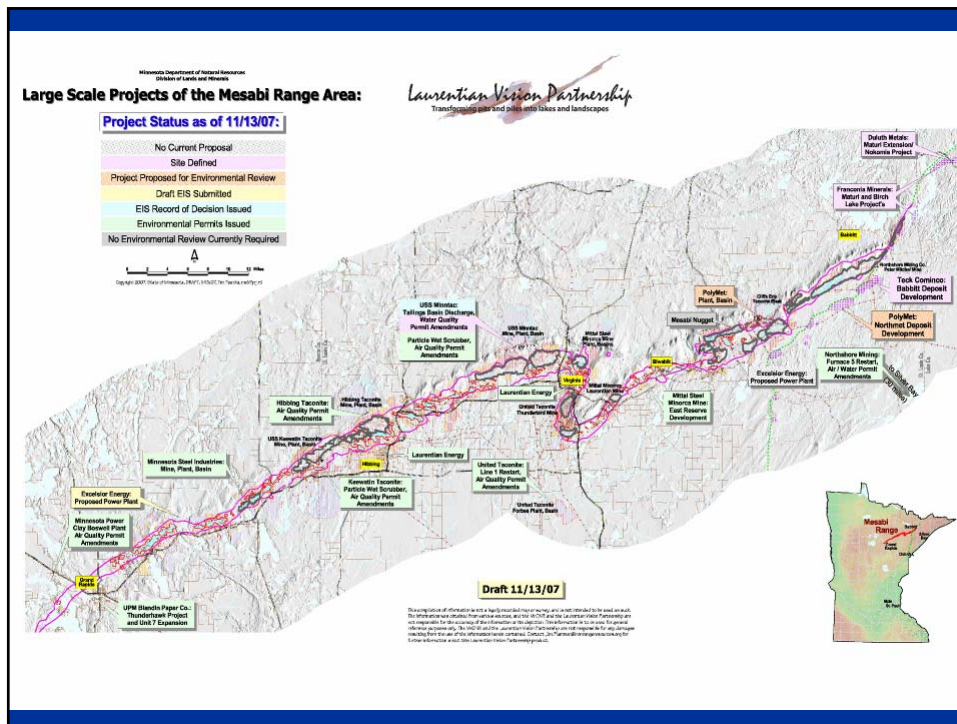
A Fond du Lac perspective
Presentation to SWiMS
March 20, 2008

Reservations, Ceded Territories

- Federally approved water quality standards, air quality program: some regulatory authority for reservation resources
- Trust responsibility of the federal government to protect resources in Ceded Territories
- Delegation of environmental regulatory program authorities (air, water) to state
- Tribal consultation for activities that impact trust resources (Executive Order)







Tribal Response Priorities

- US Steel-Minntac
- Mittal Steel
- Minnesota Steel Industries
- Steel Dynamics, Inc. (Mesabi Nugget)
- Polymet
- Franconia Minerals, other Cu-Ni-PPG projects
- Excelsior Energy
- Recently announced expansions at three more taconite plants
- Exploratory drilling

Recurring Issues

- Cumulative Impacts, including cultural resources
- Wetland acreage impacted; mitigation usually out of watershed
- Water quality permits: Few discharge limits
- Common WQ constituents not considered “toxic” – but greatly exceed ambient
- Wild rice (wetland loss, hydrology, chemistry)
- Mercury impaired waters – subsistence fishing, exercise of treaty rights
- Loss of access to treaty resources

Air Quality

- Visibility – Class 1 airsheds: BWCAW, Voyageurs, Isle Royale (PSD permits)
- Mercury emissions (in context of statewide mercury TMDL, Lake Superior Binational Program/LaMP)
- SO_x, NO_x: deposition on landscape that is poorly buffered (acidification)

How are tribes responding?

- Requested technical, financial assistance from our federal trustee, EPA
- Coordinating our efforts, sharing information, crafting comments that are consistent
- Meeting with the MPCA, DNR, companies
- Request for cooperating agency status at Polymet (Fond du Lac and Bois Forte)
- “Aggressive assertion of tribal sovereignty”



Tribal Response

- Request for supplemental EIS (selected alternative not well-analyzed)
- Concerns about loss of wild rice/sulfate
- Concerns about sulfate/mercury methylation
- Meetings with MPCA, EPA, US Steel
- Antidegradation: St. Louis River
- Collected our own water quality data
- Schedule of compliance
- Influence NPDES permit

Minnesota Steel Industries

- First taconite-to-steel plant in MN (direct reduced iron, electric arc furnace)
- New source of mercury air emissions (80 lbs/yr)
- Zero discharge: lined tailings basin; capture and treat (no 'seeps') with reverse osmosis
- Over 900 acres wetland impacts
- First company to reach out to tribes during the EIS process; supposed to be working with tribes on wetland mitigation plan



Mittal Steel

- Simultaneous release of DEIS and NPDES permit
- Permit for mine pit dewatering: Embarrass River (East Reserve, Laurentian pits) - SLR
- No discharge limits for many parameters – only monitoring requirements
- Mercury limits – stringent GLI criterion (1.3ng/l); allowed some deviation, into water listed as impaired for mercury in fish; compliance schedule allows exceedence over life of permit – then variance?
- Sulfate + wetland inundation = Hg methylation



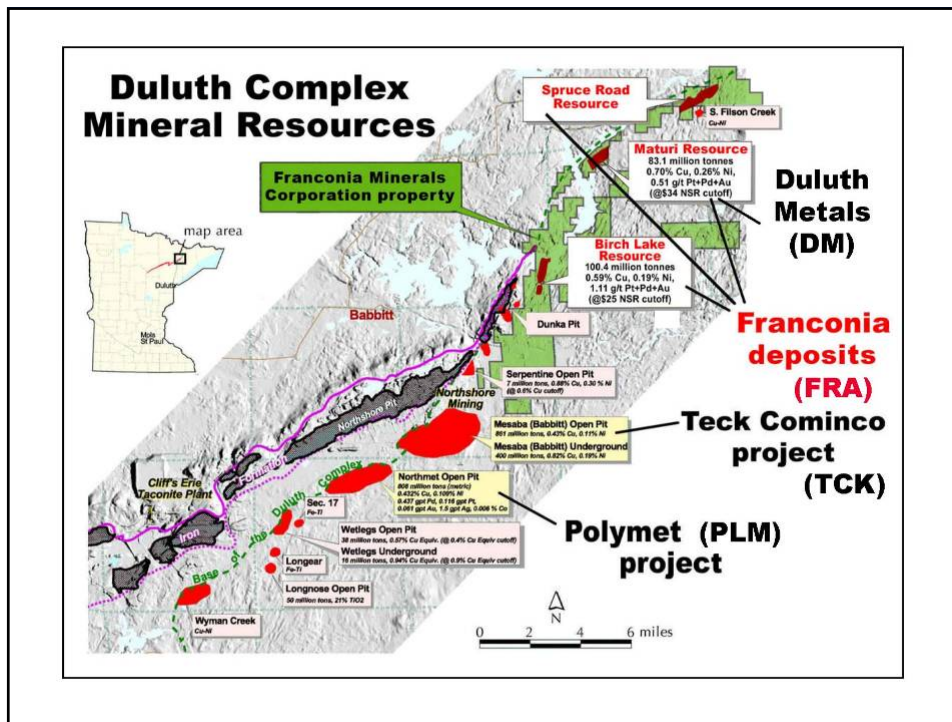
SDI (Mesabi Nugget)

- Project exempted from environmental review by the legislature (competition for siting this new technology)
- Redevelopment of LTV site; transfer of permits for water quality
- *Ceriodaphnia* chronic toxicity not resolved
- No limits in draft permit for sulfate, mercury
- Discharge to Partridge River (SLR)
- Announced intent to mine taconite onsite: will trigger new review and permitting process



Polymet (Northmet)

- First Cu-Ni PPG mine under review in Minnesota; also utilizing old LTV site; open pit
- Hydrometallurgic process - concentrate
- Supplemental project description admits that it will require **treatment in perpetuity** for acid mine drainage
- Discharge to Partridge River (SLR)
- 1200 acres wetland impacts
- Fond du Lac, Bois Forte are cooperating agencies (ACOE, DNR, USFS)
- Request to EPA for assistance in financial assurance analysis; Jim Kuipers work order from EPA HQ



Other East Range projects in line:

- Franconia Minerals: Birch Lake (lake coring), Maturi, Spruce Road – underground mining
- May be planning to send ore to Polymet for processing
- Teck Cominco
- Duluth Metals
- And – significant exploration in the West Range

- DNR auctioned additional exploratory mineral leases last fall
- Kennecott is one of many companies interested
- Aitken County unsuccessful in their moratorium (granting conditional use permits)
- Set precedent for Carlton County
- No tribal consultation, even on leases immediately adjacent to Fond du Lac, Mille Lacs



Excelsior Energy

- Coal gasification plant; draft EIS issued
- East Range/West Range alternative sites
- Billed as “clean coal” technology
- Significant new source of mercury emissions
- “Carbon capture-ready”, but not at initial construction
- Proposal to pipe CO₂ to oil fields in North Dakota
- Initial tribal consultation for NHPA Section 106 included tribes from Montana, North & South Dakota

Effectiveness of Tribal Response

- Minntac water quality permit: holding fast to state water quality criterion for wild rice waters; exploring treatment technologies for discharge
- Mesabi Nugget: MPCA agreed to include permit limits, additional monitoring requirements; abbreviated permit period
- Polymet: seat at the table for EIS; additional consideration of cultural resources, cumulative impacts, sufficient financial assurance
- Improved communications with MPCA, DNR: quarterly “summit meetings” on mining issues

